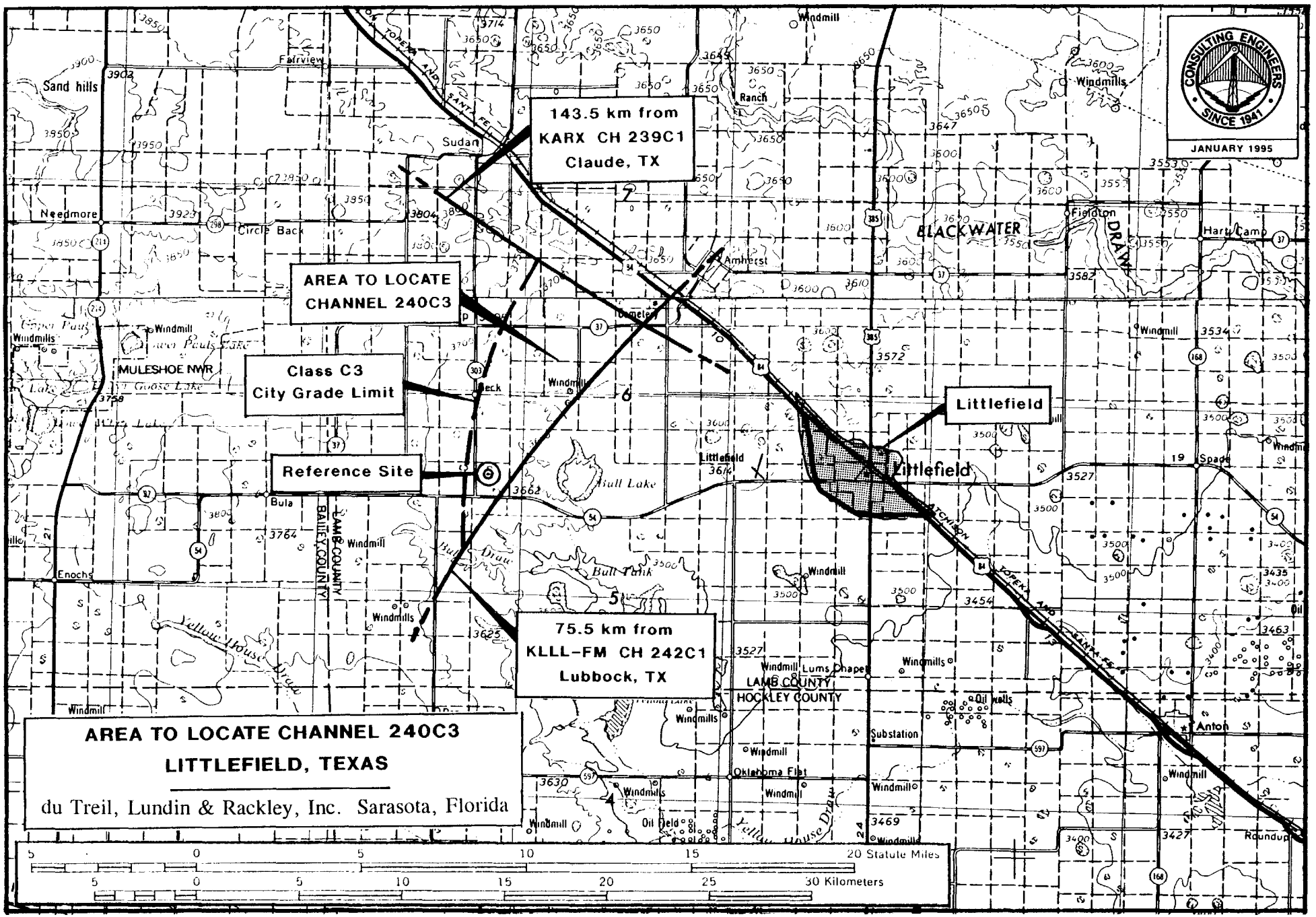
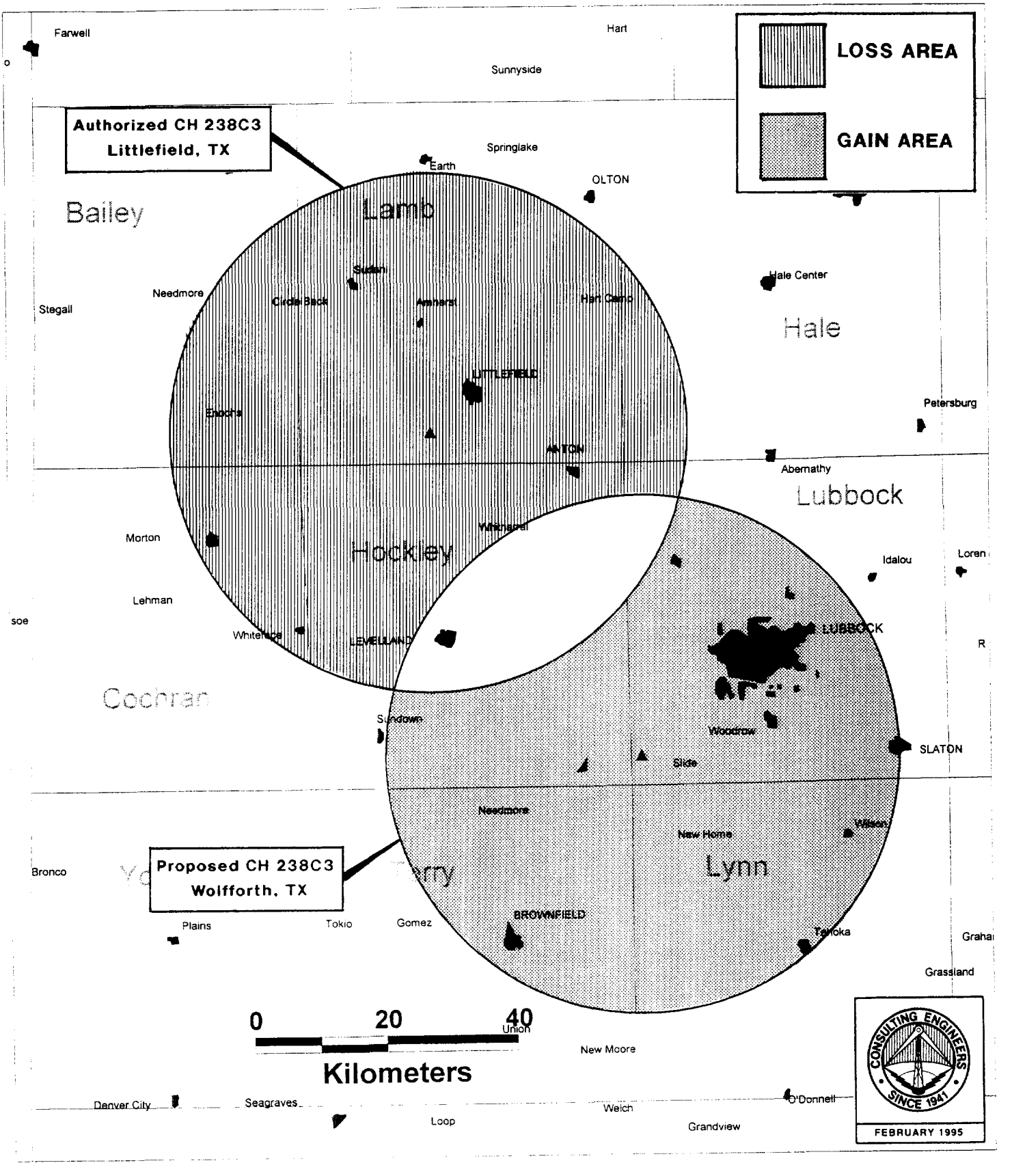

143.5 km from
KARX CH 239C1
Claude, TX
AREA TO LOCATE
CHANNEL 240C3
Class C3
City Grade Limit
Reference Site
Littlefield
75.5 km from
KLLL-FM CH 242C1
Lubbock, TX
CONSULTING ENGINEERS
SINCE 1941
JANUARY 1995
AREA TO LOCATE CHANNEL 240C3
LITTLEFIELD, TEXAS
du Treil, Lundin & Rackley, Inc. Sarasota, Florida
5 0 5 10 15 20 Statute Miles
5 0 5 10 15 20 25 30 Kilometers
Sand hills
Needmore
Circle Back
Sudan
Fairview
Ranch
Amherst
Cemetery
BLACKWATER
DRAW
Fieldton
Hart Camp
Windmills
Windmill
MULESHOE NWR
Goose Lake
Bull Lake
Bull Tank
Bula
Enochs
LAMB COUNTY
BAILEY COUNTY
Yellow House Draw
Littlefield
Spade
Lums Chapel
LAMB COUNTY
HOCKLEY COUNTY
Substation
Oklahoma Flat
Oil Field
Anton
Roundup
ATCHISON
TOPEKA AND SANTA FE

Figure 6

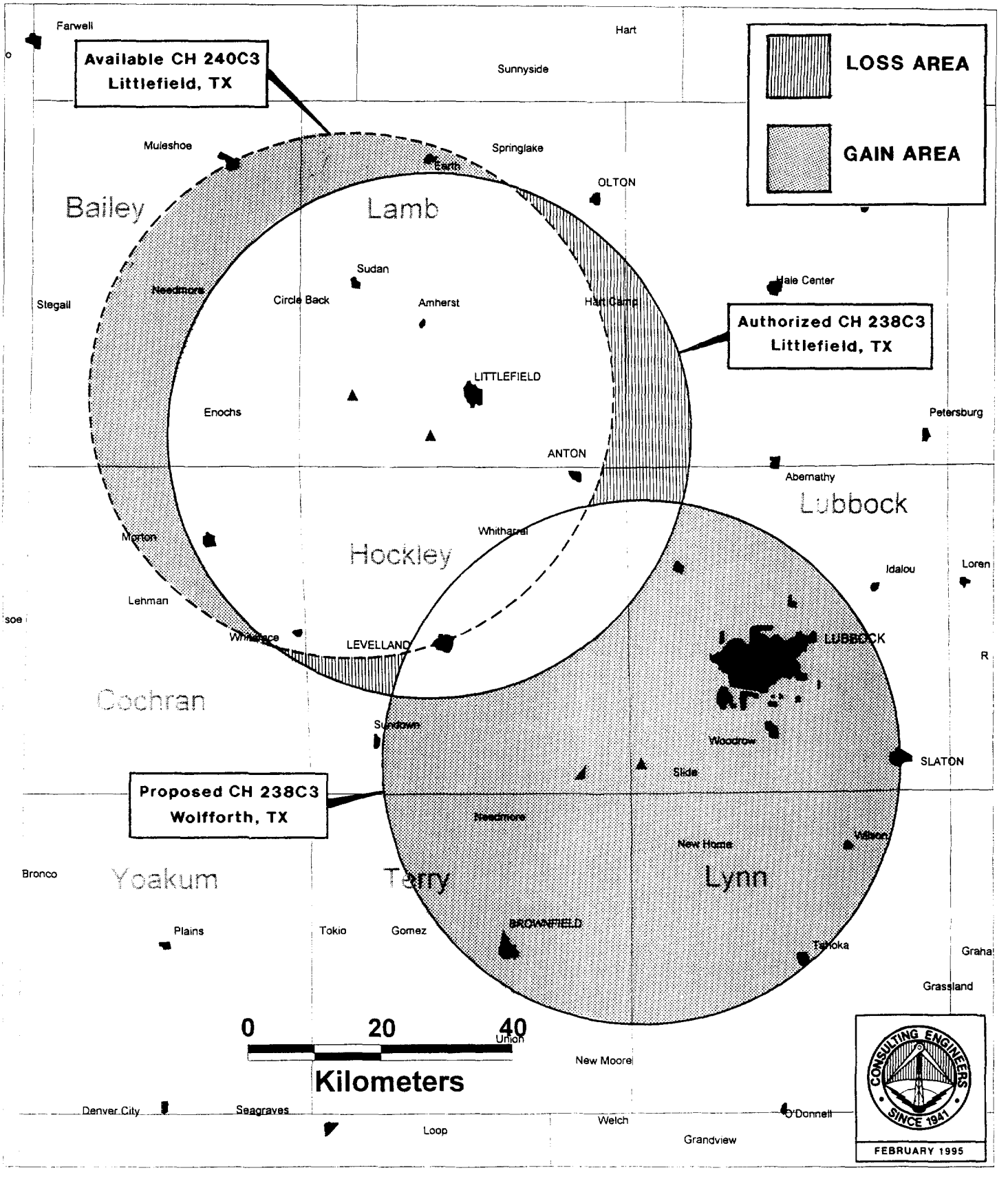
Figure 7A



1 mV/m PRIMARY SERVICE CONTOURS

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

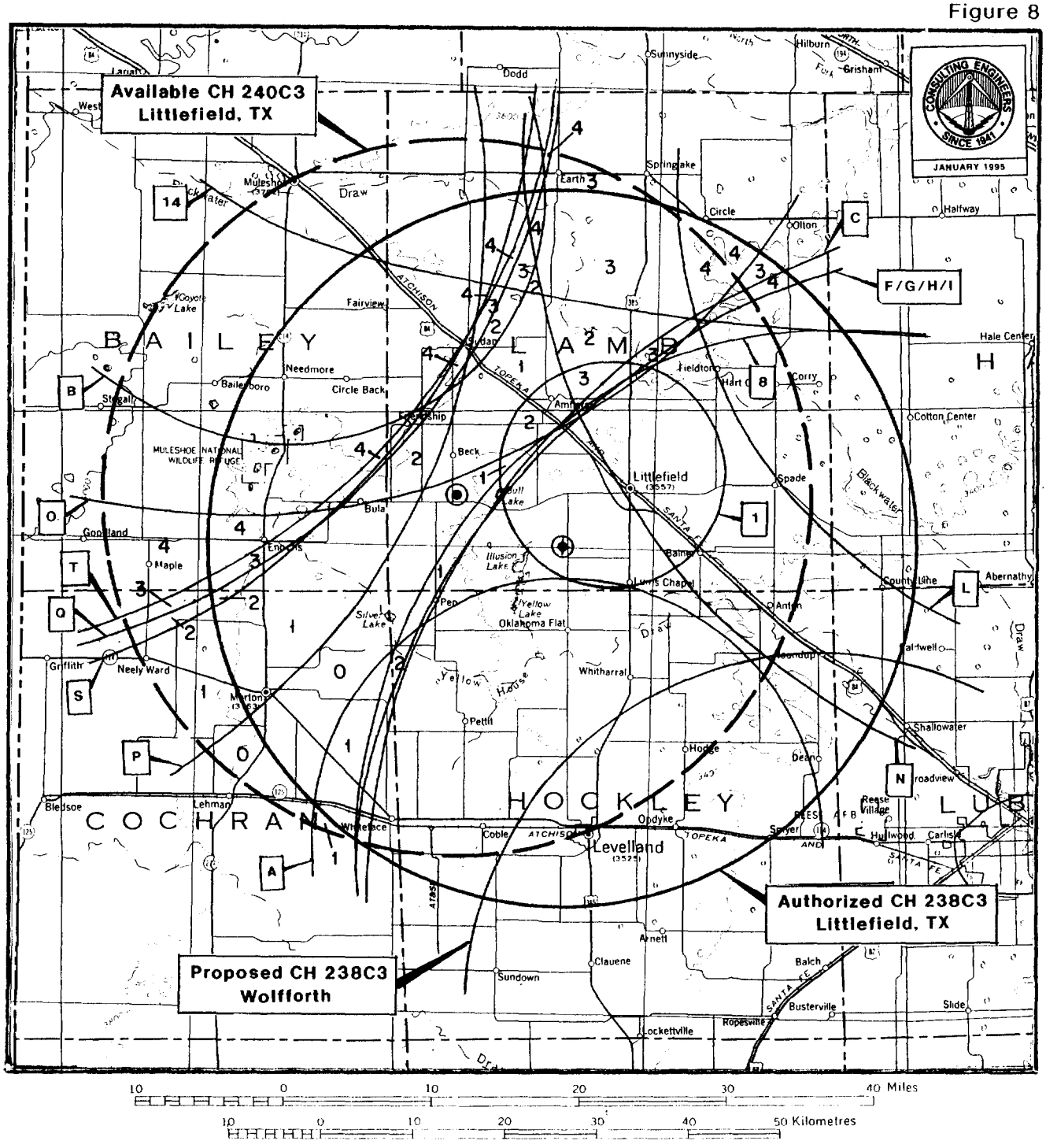
Figure 7B



1 mV/m PRIMARY SERVICE CONTOURS

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 8



RECEPTION SERVICES AVAILABLE

WITHIN AUTHORIZED 1 mV/m CONTOURS

TECHNICAL STATEMENT
IN SUPPORT OF
A PETITION FOR RULE MAKING
TO AMEND THE FM TABLE OF ALLOTMENTS
LITTLEFIELD AND WOLFFORTH, TEXAS

Tabulation of Areas, Populations and Reception Services Within 1 mV/m Coverage Contours

I. POPULATION AND AREA WITHIN 1 MV/M CONTOURS

Facilities	Within 1 mV/m Contour[1]	
	Population (1990)	Area (km^2)
Authorized Ch. 238C3, Littlefield, TX	35,214	4,798
Proposed Ch. 238C3, Wolfforth, TX	251,733	4,798
Available Ch. 240C3, Littlefield, TX	25,324	4,798

II. POPULATION AND AREA WITHIN GAIN AND LOSS AREAS

a. Available Ch. 240C3 allotment at Littlefield, Texas
Not Considered (See Figure 7A)

Area	Within 1 mV/m Contour[1]	
	Population (1990)	Area (km^2)
Gain Area	234,157	4,078
Loss Area	17,638	4,078
"Net" Gain Area	216,519	0

b. Available Ch. 240C3 allotment at Littlefield, Texas
Considered (See Figure 7B)

Area	Within 1 mV/m Contour[1]	
	Population (1990)	Area (km^2)
Gain Area	239,510	5,094
Loss Area	675	493
"Net" Gain Area	238,835	4,601

III. AVAILABLE RECEPTION SERVICES WITHIN GAIN AND LOSS AREAS

a. Available Ch. 240C3 allotment at Littlefield, Texas
<u>Not Considered</u> (See Figures 7A, 8)

Area	No. of Services	Within 1 mV/m Contour[1]	
		Population (1990)	Area (km^2)
Gain Area	5 or more	234,157	4,078
Loss Area	0	484	221
	1	2,714	464
	2	964	171
	3	349	260
	4	744	200
	5 or more	12,383	2,762

b. Available Ch. 240C3 allotment at Littlefield, Texas
<u>Considered</u> (See Figures 7B, 8)

Area	No. of Services	Within 1 mV/m Contour[1]	
		Population (1990)	Area (km^2)
Gain Area	0	54	58
	1	84	104
	2	29	16
	3	1,334	57
	4	90	100
	5 or more	237,919	4,759
Loss Area	3	14	8
	4	68	31
	5 or more	593	454

[1] Distances to 1 mV/m contours based on maximum facilities for the class and uniform terrain. Population calculated using a computer program that utilizes the 1990 U.S. Census database of "population centroids". The program adds the populations of those U.S. Census designated areas whose centroid was within each service area. The land areas were calculated using a root mean square algorithm. Stations considered for available reception services analyses tabulated on Figure 10.

Figure 10

TECHNICAL STATEMENT
IN SUPPORT OF
A PETITION FOR RULE MAKING
TO AMEND THE FM TABLE OF ALLOTMENTS
LITTLEFIELD AND WOLFFORTH, TEXAS

Radio Stations Considered for
Available Reception Services Analysis

I. FM STATIONS - 1 MV/M Contours

ID[1]	Call Letters	Location	Authorized Facilities[2]
A	KLVT-FM	Levelland, TX	Ch. 288A, 3 kW/91 m
B	KKYC	Muleshoe, TX	Ch. 276A, 3.6 kW/120 m
C	KJAK	Slaton, TX	Ch. 224C1, 100 kW/178 m
F	KFMX-FM	Lubbock, TX	Ch. 233C1, 100 kW/249 m
G	KLLL-FM	Lubbock, TX	Ch. 242C1, 100 kW/249 m
H	KJBX	Lubbock, TX	Ch. 258C1, 100 kW/249 m
I	KZII-FM	Lubbock, TX	Ch. 273C1, 100 kW/249 m
L	KKYN-FM	Plainview, TX	Ch. 280C2, 25 kW/108 m
N	KATX	Plainview, TX	Ch. 247C1, 100 kW/134 m
O	KIJN-FM	Farwell, NM	Ch. 222C1, 100 kW/108 m
P	KPWX	Clovis, NM	Ch. 298C1, 100 kW/165 m
Q	KCLV-FM	Clovis, NM	Ch. 256C1, 74 kW/70 m
S	KTQM-FM	Clovis, NM	Ch. 260C1, 100 kW/91 m
T	KLRX	Clovis, NM	Ch. 268C1, 60 kW/54 m

II. AM STATIONS - NIGHTTIME-INTERFERENCE-FREE

ID[1]	Call Letters	Location	Authorized Facilities[2]
1	KZZN	Littlefield, TX	1490 kHz, 1 kW, ND
8	KRFE	Lubbock, TX	580 kHz, 0.29 kW, DA
14	KGNZ	Amarillo, TX	710 kHz, 10 kW, DA

[1] Letters identify FM 1 mV/m contours or AM nighttime-interference-free (NIF) contours shown on Figure 8.
[2] Distances to FM 1 mV/m contours based on FCC's standard prediction method using maximum facilities for the class and presuming uniform terrain. For fulltime AM stations, distances to the NIF based on authorized nighttime facilities and Figure M3 ground conductivity values.